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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,730	08/31/2000	William B. Boyle	K35A0665	3613

26332 7590 08/05/2002

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EXAMINER

ONUAKU, CHRISTOPHER O

ART UNIT PAPER NUMBER

2615

DATE MAILED: 08/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



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7590 07/16/2002

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# Office Action Summary

Application No.  
09/652,730

Applicant(s)  
Boyle et al

Examiner  
Christopher Onuaku

Art Unit  
2615



– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Apr 9, 2002
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.
- ## Disposition of Claims
- 4) ☒ Claim(s) 1-30 is/are pending in the application
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirements

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

3. Claims 1-9,11-14,16,17,19,20,22-25&27-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Okuyama (US 6,289,169).

Regarding claim 1, Okuyama discloses in Fig.1&2 an apparatus and method for displaying recorded contents preferred to program guide information on digital broadcast, comprising:

- a) at least one recorder interface (see Fig.1, I/F circuit 31 of VTR 3) connectable to an
- b) a storage device ( see Fig.1 and cassette memory unit 33; col.5, line 48-65);
- c) an electronic program guide subsystem connected to the recorder interface to receive the electronic program guide information from the set-top box (see Fig.1 and STB1) and to

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process the electronic program guide information to schedule recording the broadcast audiovisual data on the storage device ( see Fig.1, program guide GUI generating part 25; col.4, line 53 to col.9, line 35).

Regarding claim 2, Okuyama discloses wherein the electronic program guide subsystem comprises an electronic program guide processor ( as discussed in claim 1 above, see Fig.1, and program guide GUI generating part 25; col.4, line 53 to col.9, line 35).

Regarding claim 3, Okuyama discloses wherein the electronic program guide subsystem further comprises an electronic program guide manager ( as discussed in claim 1 above, see Fig.1, and program guide GUI generating part 25; col.4, line 53 to col.9, line 35).

Regarding claim 4, Okuyama discloses wherein the electronic program guide subsystem further comprises an electronic program guide storage buffer to store the electronic program guide information (see Fig.1, cassette memory unit 33 of VTR 3; col.5, lines 48-61 and col.7, lines 30-41).

Regarding claim 5, Okuyama discloses wherein the electronic program guide subsystem is configured to present processed electronic program guide information to a user (see

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discussions in claim 1 above, Fig.1, and program guide GUI generating part 25; and col.6, line 15 to col.8, line 43)

Regarding claim 6, Okuyama discloses wherein the digital video recorder receives the electronic program guide (EPG) information and broadcast audiovisual data from a single source (see Fig.1, VTR 3, and STB1 as the single source ; col.6, line 15 to col.7, 41).

Regarding claim 7, Okuyama discloses wherein the single source is the set-top box (see claim 6 discussions, and Fig.1, STB1; col.4, lines 5-15).

Regarding claim 8, Okuyama discloses wherein the digital video recorder receives the electronic program guide (EPG) information and broadcast audiovisual data from a single interface (see Fig.1, I/F circuit 31 of VTR 3; col.5, lines 26-61), examiner reads the single interface as the VTR 3 interface, I/F circuit 31.

Regarding claim 9, Okuyama discloses wherein the digital video recorder receives the electronic program guide (EPG) information as a component of one or more channels of the broadcast audiovisual data ( see Fig.1&4, col.6, lines 38-65).

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Regarding claim 11, Okuyama discloses wherein the EPG subsystem is configured to receive EPG information selectively transmitted by the set-top box via the auxiliary interface and the recorder interface ( see col.6, line 15 to col.8, line 43).

Regarding claim 12, Okuyama discloses wherein the EPG subsystem is configured to transmit a request signal to the set-top box, where the set-top box is configured to selectively transmit the EPG information to the EPG subsystem in response to the request signal (see col.6, line 55 to col.7, line 30).

Regarding claim 13, Okuyama discloses wherein the at least one auxiliary interface supports isochronous communication (see Fig.1, I/F circuit 13 of STB1; col.4, lines 20-25).

Regarding claim 14, Okuyama discloses wherein the at least one auxiliary interface supports asynchronous communication (see Fig.1, I/F circuit 13 of STB1; col.4, lines 20-25). Here Okuyama discloses that I/F circuit 13 of STB1 is an IEEE 1394 standard interface. Inherently IEEE 1394 standard interface supports both isochronous and asynchronous transport stream communication.

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Regarding claim 16, the claimed limitations of claim 16 are accommodated in the discussions of claim 13 above. As discussed in claim 13, VCR 113 and set-top box 90 are connected through IEEE 1394 digital interface which supports isochronous communication.

Regarding claim 17, the claimed limitations of claim 17 are accommodated in the discussions of claim 14 above. As discussed in claim 13, VCR 13 and STB1 are connected through IEEE 1394 digital interface which supports asynchronous communication.

Regarding claim 19, the claimed limitations of claim 19 are accommodated in the discussions of claim 1 above.

Regarding claim 20, Okuyama discloses wherein the EPG processing device comprises a digital video recorder (see Fig.1, and VTR 3, discussions of claim 1 above, and col.8, lines 51-55).

Regarding claim 22, the claimed limitations of claim 19 are accommodated in the discussions of claim 1 above, except recognizing the connection of the digital video recorder to the set-top box, which is inherent in the Okuyama EPG system in order for Okuyama EPG system to function efficiently, whereby the STB1 communicates with the digital video recorder (VTR) 3 which facilitates the user recording of desired broadcast programs.



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Regarding claim 23, Okuyama discloses wherein the EPG information and broadcast audiovisual data are transmitted to the set-top box from a single source ( see Fig.1, STB1 and tuner 1 as the single source; col.4, lines 5-67).

Regarding claim 24, Okuyama discloses wherein the EPG information and broadcast audiovisual data are received by an input interface of the set-top box source ( see Fig.1, STB1, and I/F circuit 13; col.4, lines 5-67), here in the EPG system of Okuyama , program data (audiovisual) is received by the program data receiver STB1 through tuner 11.

Regarding claim 25, Okuyama discloses wherein the EPG information is included in the broadcast audiovisual data (see claims 23&24 discussions col.4, lines 53-65).

Regarding claim 27, the claimed limitations of claim 27 are accommodated in the discussions of claim 11 above.

Regarding claim 28, the claimed limitations of claim 28 are accommodated in the discussions of claim 12 above.

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Regarding claim 29, Okuyama discloses wherein the transmitting of EPG information from the set-top box is performed selectively in response to user input ( see col.6, line 15 to col.8, line 43).

Regarding claim 30, the claimed limitations of claim 30 are accommodated in the discussions of claim 4 above.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10&26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuyama in view of Dunn et al (US 5,648,824)..

Regarding claim 10, Okuyama fails to explicitly disclose wherein the electronic program guide (EPG) subsystem is configured to receive updated EPG information from the set-top box, where the set-top box is configured to detect updated EPG information.

Dunn teaches in Fig.2, video control user interfaces used in interactive television systems, and methods for operating an interactive television system and controlling viewing of video movies on a television, comprising set-top box 36 (I), database 52 and electronic program guide system, wherein the database 52 stores program descriptive information used to update the EPG

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(see Fig.2; col.3, line 54 to col.4, line 65). Updating EPG information provides the desirable advantage of deleting old programs in the EPG and adding new and current programs into the EPG to keep the EPG information current and up-to-date, thereby enhancing the quality of the EPG information for the user.

It would have been obvious to modify Okuyama by realizing Okuyama with the means to update the EPG information of the EPG system of Okuyama, as taught by Dunn, since updating EPG information provides the desirable advantage of deleting old programs in the EPG and adding new and current programs into the EPG to keep the EPG information current and up-to-date, thereby enhancing the quality of the EPG information for the user.

With Okuyama modified with the EPG updating means of Dunn, it would have been obvious to adapt the EPG system of Okuyama to detect the updated EPG information, since updating EPG information provides the desirable advantage of deleting old programs in the EPG and adding new and current programs into the EPG to keep the EPG information current and up-to-date, thereby enhancing the quality of the EPG information for the user.

Regarding claim 26, the claimed limitations of claim 26 are accommodated in the discussions of claim 10 above.

6. Claims 15&18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuyama in view of Lownes et al (US 6,137,539).

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Regarding claim 15, Okuyama fails to explicitly disclose wherein the at least one auxiliary interface supports synchronous communication. Lownes further teaches method for displaying status and controlling attached peripheral devices in television receivers that operate according to the digital television standard which supports synchronized processing (see col.4, lines 32-45). It would have been obvious to modify Okuyama by applying the synchronous processing principle of Lownes to Okuyama in order, for example, to synchronize the corresponding audio and video signals of Okuyama, and it would have been obvious that the recorder would record the synchronized audio and video signals received through the recorder interface, thereby supporting synchronous communication.

Regarding claim 18, the claimed limitations of claim 18 are accommodated in the discussions of claim 15 above.

7. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okuyama in view of Lawler et al (US 5,699,107).

Regarding claim 21, Okuyama discloses, at least, in Fig.1, TV2 including screen outputting part 24 to have images displayed on a display screen and for displaying GUI data (see col.4, line 42 to col.5, line 6). Okuyama fails to disclose wherein the EPG processing device comprises a user viewing monitor that keeps track of and compiles a user viewing history and set of user preferences. Lawler et al teach in Fig.1 a system for informing a user of an interactive

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viewing system that a selected program is available for viewing and a system for allowing a user to select a future program for later reminding comprising local area network (LAN) 24 that includes multiple computer servers 26 for performing various interactive system applications or functions. The servers 26 which store and process information at the headend, may include, for example, service and application servers (SAS) 30, continuous media servers 32 and electronic program guide data servers 34. The service and application servers 30 processes interactive service requests from subscribers and provides services and applications associated with, for example, network monitoring functions. The service and application servers 30 may also contain a subscriber database. The subscriber database may store subscriber specific information such as each user's identity, a login code which identifies different users, a user's viewing preferences and history. The various functions of the servers 26 may be combined so as to be carried out by a single server (see col.4, line 27 to col.5, line 12).

Providing a viewing monitoring means that keeps track of user viewing history and set of user preferences provides the desirable advantage of making available to a service provider the mechanism to track what type of programs viewers watch more often so that the service provider could then target such viewers with such similar programs.

It would have been obvious to modify Okuyama by realizing Okuyama with a viewing monitoring means that keeps track of user viewing history and set of user preferences, since providing a viewing monitoring means that keeps track of user viewing history and set of user preferences provides the desirable advantage of making available to a service provider the

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mechanism to track what type of programs viewers watch more often so that the service provider could then target such viewers with such similar programs.

***Conclusion***

8. If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Andrew B. Christensen, can be reached on (703) 308-9644.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872-9314, (for formal communications intended for entry)

and (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to Customer Service whose telephone number is (703) 306-0377.

  
COO

7/5/02

  
**ANDREW CHRISTENSEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600**